METHOD OF TUCKING SIDE PANELS WITH SIDE PANEL FOLD LOCATION CONTROL

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CROSS-REFERENCE TO RELATED APPLICATION

This application is a divisional of co-pending patent application Serial No. 09/967,024, filed on 28 September 2001; Now PATA 6, 723, 035.

BACKGROUND OF THE INVENTION

This invention is directed to a method of tucking side panels into a main body of a pant-like garment while maintaining control over the side panel fold location.

Pant-like garments, such as disposable training pants, as well as adult incontinence wear, infant and children's diapers, and swimwear, are typically folded into a compact configuration prior to packaging. The folded configuration typically includes folding the garment in half such that a front waist edge is aligned with and adjacent a back waist edge. For an even tidier appearance, the side panels or side portions of the garment can be tucked in between a front panel and a back panel of the garment.

Certain automated processes exist in which the side panels are mechanically tucked into the garments along a conveyor prior to the garments reaching a stacking or accumulation device. In such processes, as the garment is being conveyed towards the stacker, mechanical blades rotate or travel with the product machine direction and push the side panels in from each side of the conveyor. The location of the mechanical blades is relied upon to control the location of the resulting folds. Alternatively, pneumatic forces, such as air bars are used to tuck the side panels. However, the location of the side panel folds is often inconsistent when such processes are used.

Some processes use vacuum to hold products on a conveyor, but the vacuum is applied effectively only at the center of the chassis, and at a moderate level, for example around 15 inches of water. Such use of a vacuum is not effective along the sides of the chassis.

Another drawback to using conventional side panel tucking methods is that the side panels are typically tucked completely inside the garment, thereby obscuring the consumer's view of the side panels prior to purchasing the garment.